

AMENDMENTS TO THE CLAIMS

Please cancel claims 1, and 2, and 5 - 8, amend claims 3, 9 and 10, and add new claims 11-13 as follows:

3. (Currently amended) A semiconductor device as set forth in claim 4 ~~9~~, wherein a universal contact structure including the second conductivity type region is provided in contact with the electrode.

9. (Currently amended) A semiconductor device ~~in any of claims 1, 3 and 6,~~
comprising:

a functional element having a first conductivity type semiconductor region provided in a semiconductor substrate, and a second conductivity type semiconductor region provided in contact with the first conductivity type semiconductor region and having a conductivity type different from that of the first conductivity type semiconductor region,

wherein a diode is provided in a boundary portion of a contact region to which an electrode is connected in the first conductivity type semiconductor region, the diode including a second conductivity type region embedded in the first conductivity type semiconductor region in a region crossing over a boundary of the contact region, the second conductivity type region having a conductivity type different from that of the first conductivity type semiconductor region, the second conductivity type region being in contact with the electrode in the contact region, wherein a universal contact structure including the second conductivity type region is provided in contact with the electrode, and

wherein a bonding region is defined on the first conductivity type semiconductor region for bonding a wire to the electrode, and the diode is provided at least in a part of the boundary portion of the contact region adjacent to the bonding region.

10. (Currently amended) A semiconductor device ~~as set forth in any of claims 1, 3 and 6, comprising~~

a functional element having a first conductivity type semiconductor region provided in a semiconductor substrate, and a second conductivity type semiconductor region provided in contact with the first conductivity type semiconductor region and having a conductivity type different from that of the first conductivity type semiconductor region,

wherein a diode is provided in a boundary portion of a contact region to which an electrode is connected in the first conductivity type semiconductor region, the diode including a second conductivity type region embedded in the first conductivity type semiconductor region in a region crossing over a boundary of the contact region, the second conductivity type region having a conductivity type different from that of the first conductivity type semiconductor region, the second conductivity type region being in contact with the electrode in the contact region, and

wherein the functional element is a bipolar transistor which comprises a base region defined by the first conductivity type semiconductor region, and an emitter region defined by the second conductivity type semiconductor region.

11. (new) A semiconductor device as set forth in claim 10, wherein a universal contact structure including the second conductivity type region is provided in contact with the electrode.

12. (new) A semiconductor device, comprising:

a functional element having a first conductivity type semiconductor region provided in a semiconductor substrate, and a second conductivity type semiconductor region provided in contact with the first conductivity type semiconductor region and having a conductivity type different from that of the first conductivity type semiconductor region,

wherein a diode is provided in a boundary portion of a contact region to which an electrode is connected in the first conductivity type semiconductor region,

wherein the contact region has a generally C-shape or a ring shape which surrounds the second conductivity type semiconductor region on the surface of the first conductivity type semiconductor region, and

wherein a bonding region is defined on the first conductivity type semiconductor region for bonding a wire to the electrode, and the diode is provided at least in a part of the boundary portion of the contact region adjacent to the bonding region

13. (New) A semiconductor device, comprising

a functional element having a first conductivity type semiconductor region provided in a semiconductor substrate, and a second conductivity type semiconductor region provided in

contact with the first conductivity type semiconductor region and having a conductivity type different from that of the first conductivity type semiconductor region,

wherein a diode is provided in a boundary portion of a contact region to which an electrode is connected in the first conductivity type semiconductor region,

wherein the contact region has a generally C-shape or a ring shape which surrounds the second conductivity type semiconductor region on the surface of the first conductivity type semiconductor region, and

wherein the functional element is a bipolar transistor which comprises a base region defined by the first conductivity type semiconductor region, and an emitter region defined by the second conductivity type semiconductor region.